# National Renewable Energy Laboratory

# Shared Resources CRADA Cooperative Research and Development Agreement

STEVENSON-WYDLER (15 USC 3710)
COOPERATIVE RESEARCH AND DEVELOPMENT AGREEMENT
(hereinafter "CRADA") No. CRD-03-1xx

#### between

Midwest Research Institute, Operator of The National Renewable Energy Laboratory under its U.S. Department of Energy Contract No. DE-AC36-99GO10337, 1617 Cole Blvd., Golden, CO 80401 (hereinafter "Contractor")

and

<Participant name>
<Participant address>
<city, state, zip>

(hereinafter "Participant"),

both being hereinafter jointly referred to as the "Parties"

## **ARTICLE I. Definitions**

- A. "Government" means the Federal Government of the United States of America and agencies thereof.
- B. "DOE" means the Department of Energy, an agency of the Federal Government.
- C. "Contracting Officer" means the DOE employee administering the Contractor's DOE contract.
- D. "Generated Information" means information produced in the performance of this CRADA.
- E. "Proprietary Information" means information which embodies (i) trade secrets or (ii) commercial or financial information which is privileged or confidential under the Freedom of Information Act (5 USC 552 (b)(4)), either of which is developed at private expense outside of this CRADA and is marked as Proprietary Information.
- F. "Protected CRADA Information" means Generated Information which is marked as being Protected CRADA Information by a Party to this CRADA and which would have been Proprietary Information had it been obtained from a non-Federal entity.
- G. "Subject Invention" means any invention of the Contractor or Participant conceived or first actually reduced to practice in the performance of work under this CRADA.
- H. "Intellectual Property" means Patents, Trademarks, Copyrights, Mask Works, Protected CRADA Information and other forms of comparable property rights protected by Federal Law and other foreign counterparts, except Trade Secrets.

- I. "Trademark" means a distinctive mark, symbol, or emblem used in commerce by a producer or manufacturer to identify and distinguish its goods or services from those of others.
- J. "Service Mark" means a distinctive word, slogan, design, picture, symbol, or any combination thereof, used in commerce by a person to identify and distinguish its services from those of others.
- K. "Mask Work" means a series of related images, however fixed or encoded, having or representing the predetermined, three-dimensional pattern of metallic, insulating, or semiconductor material present or removed from the layers of a semiconductor chip product and in which series the relation of the images to one another is that each image has the pattern of the surface of one form of the semiconductor chip product.
- L. "Background Intellectual Property" means the Intellectual Property identified by the
  Parties (in an Appendix titled "Background Intellectual Property," if applicable), which was in
  existence prior to or is first produced outside of this CRADA, except that in the case of
  inventions in those identified items, the inventions must have been conceived outside of this
  CRADA

and not first actually reduced to practice under this CRADA to qualify as Background Intellectual Property.

- M. "Foreign Interest" is defined as any of the following:
  - (1) A foreign government or foreign government agency;
  - (2) Any form of business enterprise organized under the laws of any country other than the United States or its possessions;
  - (3) Any form of business enterprise organized or incorporated under the laws of the United States, or a State or other jurisdiction within the United States, which is owned, controlled, or influenced by a foreign government, agency, firm, corporation or person; or
  - (4) Any person who is not a U.S. citizen.
- N. "Foreign ownership, control, or influence (FOCI)" means the situation where the degree of ownership, control, or influence over a participant by a foreign interest is such that a reasonable basis exists for concluding that compromise of classified information or special nuclear material, as defined in 10 CFR Part 710, may result.

#### **ARTICLE II. Joint Work Statement**

Appendix A, Statement of Work, is an integral part of this CRADA.

# ARTICLE III. Term, Funding, and Costs

- A. The effective date of this CRADA shall be the later date of (1) the date on which it is signed by the last of the Parties hereto or (2) the date on which it is approved by DOE. The work to be performed under this CRADA shall be completed within <n> months from the effective date.
- B. The Participant's estimated contribution is <\$00.00>. The Government's estimated in-kind contribution, which is provided through the Contractor's contract with DOE, is <\$00.00> subject to available funding.

- C. Neither Party shall have an obligation to continue nor complete performance of its work at a contribution in excess of its contribution as contained in Article III B and C above, including any subsequent modification.
- D. Each Party agrees to provide at least thirty- (30) days notice to the other Party if the actual cost to complete performance will exceed its estimated cost.
- E. The Participant shall provide to the Contractor sufficient advance funds to maintain an approximately 90 day advance of funds during the entire period of work. If this is a 100 % funds-in CRADA, no work will begin before the receipt of a sufficient cash advance. Failure of the Participant to provide the necessary advance funding is cause for termination of the CRADA.

#### **ARTICLE IV. Personal Property**

All tangible personal property produced or acquired under this CRADA (specifically excluding Intellectual Property rights, Background Intellectual Property, and Proprietary Information) shall become the property of the Participant or the Government, depending upon whose funds were used to obtain it. Such property is identified in Appendix A, Statement of Work. Personal Property shall be disposed of as directed by the owner at the owner's expense. There shall not be any jointly funded property under this CRADA except by the mutual agreement of the Parties.

#### **ARTICLE V. Disclaimer**

THE GOVERNMENT, THE PARTICIPANT, AND THE CONTRACTOR MAKE NO EXPRESS OR IMPLIED WARRANTY AS TO THE CONDITIONS OF THE RESEARCH OR ANY INTELLECTUAL PROPERTY, GENERATED INFORMATION, OR PRODUCT MADE OR DEVELOPED UNDER THIS CRADA, OR THE OWNERSHIP, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OF THE RESEARCH OR RESULTING PRODUCT. NEITHER THE GOVERNMENT, THE PARTICIPANT, NOR THE CONTRACTOR SHALL BE LIABLE FOR LOST PROFITS, LOST SAVINGS, SPECIAL, CONSEQUENTIAL, INCIDENTAL OR OTHER INDIRECT DAMAGES, EVEN IF SUCH PARTY IS MADE AWARE OF THE POSSIBILITY THEREOF.

#### **ARTICLE VI. Product Liability**

Except for any liability resulting from any negligent or intentional acts or omissions of Contractor, the Participant indemnifies the Government and the Contractor for all damages, costs and expenses, including attorney's fees, arising from personal injury or property damage occurring as a result of the making, using or selling of a product, process or service by or on behalf of the Participant, its assignees or licensees, which was derived from the work performed under this CRADA. In respect to this Article, neither the Government nor the Contractor shall be considered assignees or licensees of the Participant, as a result of reserved Government and Contractor rights. The indemnity set forth in this Paragraph shall apply only if Participant shall have been informed as soon and as completely as practical by the Contractor and/or the Government of the action alleging such claim and shall have been given an opportunity, to the maximum extent afforded by applicable laws, rules, or regulations, to participate in and control its defense, and the Contractor and/or Government shall have provided all reasonably available information and reasonable assistance requested by the Participant. No settlement for which the Participant would be responsible shall be made without the Participant's consent unless required by final decree of a court of competent jurisdiction.

#### **ARTICLE VII. Obligations As To Proprietary Information**

- A. Each Party agrees to not disclose Proprietary Information provided by another Party to anyone other than the CRADA Participant and Contractor without written approval of the providing Party, except to Government employees who are subject to the statutory provisions against disclosure of confidential information set forth in the Trade Secrets Act (18 USC 1905).
- B. If Proprietary Information is orally disclosed to a Party, it shall be identified as such, orally, at the time of disclosure and confirmed in a written summary thereof, appropriately marked by the disclosing Party, within ten (10) days as being Proprietary Information.
- C. All Proprietary Information shall be returned to the provider thereof at the conclusion of this CRADA at the provider's expense.
- D. All Proprietary Information shall be protected for a period of five (5) years from the effective date of this CRADA, unless such Proprietary Information shall become publicly known without the fault of the recipient, shall come into recipient's possession without breach by the recipient of any of the obligations set forth herein, or is independently developed by recipient's employees who did not have access to such Proprietary Information.
- E. In no case shall the Contractor provide Proprietary Information of the Participant to any person or entity for commercial purposes, unless otherwise agreed to in writing by such Participant.

## ARTICLE VIII. Obligations As To Protected CRADA Information

- A. Each Party may designate as Protected CRADA Information any Generated Information produced by its employees which meets the definition of Article I.F and, with the agreement of the other Party, so designate any Generated Information produced by the other Party's employees which meets the definition of Article I. F. All such designated Protected CRADA Information shall be appropriately marked.
- B. For a period of five (5) years from the date Protected CRADA Information is produced, the Parties agree not to further disclose such information except:
  - (1) as necessary to perform this CRADA;
  - (2) as provided in Article XI [REPORTS AND ABSTRACTS];
  - as requested by the DOE Contracting Officer to be provided to other DOE facilities for use only at those DOE facilities with the same protection in place;
  - (4) to existing or potential licensees, affiliates, customers, or suppliers of the parties in support of commercialization of the technology with the same protection in place.

    Disclosure of Participant's Protected CRADA Information under this subparagraph shall only be done with Participant's consent; or
  - (5) as mutually agreed by the Parties in advance.
- C. The obligations of B. above shall end sooner for any Protected CRADA Information which shall become publicly known without fault of either Party, shall come into a Party's possession without breach by that party of the obligations of paragraph B above, or shall be independently developed by a Party's employees who did not have access to the protected CRADA Information.

#### **ARTICLE IX. Rights in Generated Information**

The Parties agree that they shall have no obligations of nondisclosure or limitations on their use of, and the Government shall have unlimited rights in, all Generated Information produced and information provided by the Parties under this CRADA, except for (a) information which is marked as being Copyrighted (subject to Article XIII) or as Protected CRADA Information (subject to Article VII B) or as Proprietary Information (subject to Article VII B), or (b) information that discloses an invention which may later be the subject of a U.S. or foreign patent application.

#### **ARTICLE X. Export Control**

THE PARTIES UNDERSTAND THAT MATERIALS AND INFORMATION RESULTING FROM THE PERFORMANCE OF THIS CRADA MAY BE SUBJECT TO EXPORT CONTROL LAWS AND THAT EACH PARTY IS RESPONSIBLE FOR ITS OWN COMPLIANCE WITH SUCH LAWS.

## **ARTICLE XI.** Reports and Abstracts

- A. The Parties agree to produce the following deliverables:
  - (1) an initial abstract suitable for public release at the time the CRADA is approved by DOE;
  - (2) other abstracts (final when work is complete, and others as substantial changes in scope and dollars occur);
  - (3) a final report, upon completion or termination of this CRADA, to include a list of Subject Inventions;
  - (4) an annual signed financial report of the Participant's in-kind contributions to the project;
  - (5) other reports as required in Appendix A, Joint Work Statement;
  - (6) computer software in source and executable object code format as defined within the Statement of Work or elsewhere within the CRADA documentation.
    - Each of the above-identified deliverables shall include the project identification number as described in DOE's Research and Development (R&D) Tracking System Data and Process Guidance Document (http://www.doe.gov/rd/).
- B. The Parties acknowledge that the Contractor has the responsibility to provide the above information at the time of its completion to the DOE Office of Scientific and Technical Information.
- C. The Participant agrees to provide the above information to the Contractor to enable full compliance with paragraph B of this Article.
- D. The Parties acknowledge that the Contractor and the DOE have a need to document the long-term economic benefit of the cooperative research under this CRADA. Therefore, the Participant shall respond to the Contractor's reasonable requests, during the term of this CRADA and for a period of two (2) years thereafter for pertinent information.

#### **ARTICLE XII: Prepublication Review**

A. The Parties agree to secure prepublication approval from each other, which shall not be unreasonably withheld or denied beyond sixty (60) days.

B. The Parties agree that neither will use the name of the other Party or its employees in any promotional activity, such as advertisements, with reference to any product or service resulting from this CRADA, without prior written approval of the other Party.

## **ARTICLE XIII.** Copyrights

- A. The Parties may assert copyright in any of their Generated Information. Assertion of Copyright generally means to enforce or give an indication of intent or right to enforce such as by marking or securing Federal registration.
- B. Each Party shall have the first option to assert Copyright in works authored by its employees. Copyrights in co-authored works by employees of the Parties shall be held jointly, and use by either Party shall be without accounting. A Party electing not to assert Copyright in a work authored by its employees agrees to assign such Copyright to the other Party upon the request of, and at the expense of, the other Party.
- C. For Generated Information, the Parties acknowledge that the Government has for itself and others acting on its behalf, a royalty-free, non-transferable, nonexclusive, irrevocable worldwide Copyright license to reproduce, prepare derivative works, distribute copies to the public, and perform publicly and display publicly, by or on behalf of the Government, all copyrightable works produced in the performance of this CRADA, subject to the restrictions this CRADA places on publication of Proprietary Information and Protected CRADA Information.
- D. For all Copyrighted computer software produced in the performance of this CRADA, the Party owning the Copyright will provide the source code, an expanded abstract as described in Appendix A, the executable object code and the minimum support documentation needed by a competent user to understand and use the software to DOE's Energy, Science, and Technology Software Center, P.O. Box 1020, Oak Ridge, TN 37831. The expanded abstract will be treated in the same manner as Generated Information in paragraph C. of this article.
- E. The Contractor and the Participant agree that, with respect to any Copyrighted computer software produced in the performance of this CRADA, DOE has the right, at the end of the period set forth in paragraph B. of Article VIII hereof and at the end of each 2-year interval thereafter, to request the Contractor and the Participant and any assignee or exclusive licensee of the Copyrighted software to grant a nonexclusive, partially exclusive, or exclusive license to a responsible applicant upon terms that are reasonable under the circumstances, provided such grant does not cause a termination of any licensee's right to use the Copyrighted computer software. If the Contractor or the Participant or any assignee or exclusive licensee refuses such request, the Contractor and the Participant agree that DOE has the right to grant the license if DOE determines that the Contractor, the Participant, assignee, or licensee has not made a satisfactory demonstration that it is actively pursuing commercialization of the Copyrighted computer software.

Before requiring licensing under this paragraph E, DOE shall furnish the Contractor/Participant written notice of its intentions to require the Contractor/Participant to grant the stated license, and the Contractor/Participant shall be allowed 30 days (or such longer period as may be authorized by the cognizant DOE Contracting Officer for good cause shown in writing by the Contractor/Participant) after such notice to show cause why the license should not be required to be granted.

The Contractor/Participant shall have the right to appeal the decision by DOE to the grant of the stated license to the Invention Licensing Appeal Board as set forth in paragraphs (b) - (g) of 10 CFR 781.65, "Appeals."

F. The Parties agree to place Copyright and other notices, as appropriate for the protection of Copyright, in human-readable form onto all physical media, and in digitally encoded form in the header of machine-readable information recorded on such media such that the notice will appear in human-readable form when the digital data are off-loaded or the data are accessed for display or printout.

#### **ARTICLE XIV. Reporting Subject Inventions**

- A. The Parties agree to disclose to each other each Subject Invention which may be patentable or otherwise protectable under the Patent Act. The Parties agree that the Contractor and Participant will disclose their respective Subject Inventions to the DOE and each other within two (2) months after the inventor first discloses the Subject Invention in writing to the person(s) responsible for Patent matters of the disclosing Party.
- B. These disclosures should be in sufficiently complete technical detail to convey a clear understanding, to the extent known at the time of the disclosure, of the nature, purpose and operation of the Subject Invention. The disclosure shall also identify any known actual or potential statutory bars, i.e., printed publications describing the Subject Invention or the public use or "on sale" of the Subject Invention in this country. The Parties further agree to disclose to each other any subsequently known actual or potential statutory bar that occurs for a Subject Invention disclosed but for which a patent application has not been filed. All Subject Invention disclosures shall be marked as confidential under 35 USC 205.

# **ARTICLE XV.** Title to Subject Inventions

Wherein the DOE has granted the Participant and the Contractor the right to elect to retain title to their respective Subject Inventions, and wherein the Participant has the option to choose an exclusive license, for reasonable compensation, for a pre-negotiated field of use to the Contractor's Subject Inventions,

- A. Each Party shall have the first option to elect to retain title to any Subject Invention made by its employees, and that election shall be made: (1) for the Participant, within 12 months of disclosure of the Subject Invention to DOE, or (2) for the Contractor, within 12 months of disclosure of the Subject Invention to DOE. If a Party elects not to retain title to any Subject Invention of its employees, the other Party shall have the second option to elect to retain title to such Subject Invention of this CRADA. The DOE may obtain title to any Subject Invention which is not retained by any Party. For Subject Inventions conceived or first actually reduced to practice under this CRADA, which are joint Subject Inventions made by the Contractor and the Participant, title to such Subject Inventions shall be jointly owned by the Contractor and the Participant.
- B. The Parties acknowledge that the DOE may obtain title to each Subject Invention reported under Article XIV for which a patent application or applications are not filed pursuant to Article XVI and for which any issued patents are not maintained by any Party to this CRADA.
- C. The Parties acknowledge that the Government retains a nonexclusive, nontransferable, irrevocable, paid-up license to practice or to have practiced for or on behalf of the United States

<sup>1 --</sup> Because NREL is managed and operated by the Midwest Research Institute, a not-for-profit entity, DOE's access to title to Subject Inventions which are not retained by any Party is an option, not a right.

- every Subject Invention under this CRADA throughout the world. The Parties agree to execute a Confirmatory License to affirm the Government's retained license.
- D. During the term of this CRADA and for a period of 6 months after the termination or completion of the CRADA, the Participant shall have the opportunity, pursuant to 15 USC 3710a, to obtain a license to NREL Subject Inventions. In particular, the Participant shall have the option to obtain up to and including an exclusive license to NREL Subject Inventions within a defined field of use on agreed-upon reasonable terms and conditions, including the payment of negotiated license fees and royalties.

## **ARTICLE XVI. Filing Patent Applications**

- A. The Parties agree that the Party initially indicated as having an ownership interest in any Subject Inventions ("Inventing Party") shall have the first opportunity to file U.S. and foreign patent applications. If the Participant does not file such applications within one year after election, or if the Contractor does not file such applications within the filing time specified in its prime contract, the other Party to this CRADA exercising an option pursuant to Article XV may file Patent applications on such Subject Inventions. If a Patent application is filed by the other Party (Filing Party), the Inventing Party shall reasonably cooperate and assist the Filing Party, at the Filing Party's expense, in executing a written assignment of the Subject Invention to the Filing Party and in otherwise perfecting the Patent application, and the Filing Party shall have the right to control the prosecution of the Patent application. The Parties shall agree between themselves as to who will file Patent applications on any joint Subject Invention.
- B. The Parties agree that DOE has the right to file Patent applications in any country if neither Party desires to file a Patent application for any Subject Invention. Notification of such negative intent shall be made in writing to the DOE Contracting Officer within three (3) months of the decision of the non-Inventing Party to not file a Patent application for the Subject Invention pursuant to Article XV or not later than 60 days prior to the time when any statutory bar might foreclose filing of a U.S. Patent application.
- C. The Parties agree to include with the beginning of the specification of any U.S. Patent applications and any Patent issuing thereon (including foreign patents) covering a Subject Invention, the following statement: "This invention was made under a CRADA (identify CRADA number) between (name of Participant) and (name of laboratory) operated for the U.S. Department of Energy. The Government has certain rights in this invention."
- D. A Party electing title or filing a Patent application in the United States or in any foreign country shall advise the other Party and the DOE if it no longer desires to continue prosecution, pay maintenance fees, or retain title in the United States or any foreign country. The other Party and then the DOE will be afforded the opportunity to take title and retain the Patent rights in the United States or in any such foreign country.

**ARTICLE XVII. Trademarks** [Reserved]

**ARTICLE XVIII. Mask Works** [Reserved]

#### **ARTICLE XIX.** Cost of Intellectual Property Protection

Each Party shall be responsible for payment of all costs relating to Copyright, Trademark, and Mask Work filing; U.S. and foreign Patent application filing and prosecution; and all costs relating to maintenance fees for U.S. and foreign Patents hereunder which are solely owned by that Party. Government/DOE laboratory funds contributed as DOE's cost share to a CRADA cannot be given to the Participant for payment of the Participant's costs of filing and maintaining Patents or filing of Copyrights, Trademarks, or Mask Works.

# ARTICLE XX. Reports of Intellectual Property Use

Participant agrees to submit, for a period of five (5) years from the date of termination or completion of this CRADA and upon request of DOE, a non-proprietary report no more frequently than annually on efforts to utilize any Intellectual Property arising under the CRADA.

#### **ARTICLE XXI. DOE March-In Rights**

The Parties acknowledge that the DOE has certain march-in rights to any Subject Inventions in accordance with 48 CFR 27.304-1(g) and 15 USC 3710a(b)(1)(B) and (C).

## **ARTICLE XXII. U.S. Competitiveness**

The Parties agree that a purpose of this CRADA is to provide substantial benefit to the U.S. economy.

- A. In exchange for the benefits received under this CRADA, the Participant therefore agrees to the following:
  - 1. Products embodying Intellectual Property developed under this CRADA shall be substantially manufactured in the United States; and
  - 2. Processes, services, and improvements thereof which are covered by Intellectual Property developed under this CRADA shall be incorporated into the Participant's manufacturing facilities in the United States either prior to or simultaneously with implementation outside the United States. Such processes, services, and improvements, when implemented outside the United States, shall not result in reduction of the use of the same processes, services, or improvements in the United States.
- B. The Contractor agrees to a U.S. Industrial Competitiveness clause in accordance with its prime contract with respect to any licensing and assignments of its intellectual property arising from this CRADA, except that any licensing or assignment of its intellectual property rights to the Participant shall be in accordance with the terms of Paragraph A of this Article.

# **ARTICLE XXIII.** Assignment of Personnel

A. Each Party may assign personnel to the other Party's facility as part of this CRADA to participate in or observe the research to be performed under this CRADA. Such personnel assigned by the assigning Party shall not during the period of such assignments be considered employees of the receiving Party for any purpose.

- B. The receiving Party shall have the right to exercise routine administrative and technical supervisory control of the occupational activities of such personnel during the assignment period and shall have the right to approve the assignment of such personnel and/or to later request their removal by the assigning Party.
- C. The assigning Party shall bear any and all costs and expenses with regard to its personnel assigned to the receiving Party's facilities under this CRADA. The receiving Party shall bear the costs of providing an appropriate workspace, access to a telephone, use of laboratory, manufacturing or other work areas as appropriate, and any other utilities and facilities related to such assignments.

#### **ARTICLE XXIV. Force Majeure**

No failure or omission by Contractor or Participant in the performance of any obligation under this CRADA shall be deemed a breach of this CRADA or create any liability if the same shall arise from any cause or causes beyond the control of Contractor or Participant, including but not limited to the following, which, for the purpose of this CRADA, shall be regarded as beyond the control of the Party in question: Acts of God, acts or omissions of any government or agency thereof, compliance with requirements, rules, regulations, or orders of any governmental authority or any office, department, agency, or instrumentality thereof, fire, storm, flood, earthquake, accident, acts of the public enemy, war, rebellion, insurrection, riot, sabotage, invasion, quarantine, restriction, transportation embargoes, or failures or delays in transportation.

# ARTICLE XXV. Administration of the CRADA

The Contractor enters into this CRADA under the authority of its prime contract with DOE. The Contractor is authorized to and will administer this CRADA in all respects unless otherwise specifically provided for herein. Administration of this CRADA may be transferred from the Contractor to DOE or its designee with notice of such transfer to the Participant, and the Contractor shall have no further responsibilities except for the confidentiality, use and/or nondisclosure obligations of this CRADA.

## **ARTICLE XXVI. Records and Accounting for Government Property**

The Participant shall maintain records of receipts, expenditures, and the disposition of all Government property in its custody related to the CRADA.

#### **ARTICLE XXVII. Notices**

A. Any communications required by this CRADA, if given by postage prepaid first class U.S. Mail or other verifiable means addressed to the Party to receive the communication, shall be deemed made as of the day of receipt of such communication by the addressee, or on the date given if by verified facsimile. Address changes shall be given in accordance with this article and shall be effective thereafter. All such communications, to be considered effective, shall include the number of this CRADA.

B. The addresses, telephone numbers and facsimile numbers for the Parties are as follows:

# Participant:

<Name>
<Participant company>
<Address>
<City, state, zip>
Tel: (xxx) xxx-xxxx
Fax: (xxx) xxx-xxxx

#### Contractor:

<Name>

National Renewable Energy Laboratory, Division of Midwest Research Institute 1617 Cole Boulevard Golden, CO 80401-3393

Tel: (303) 384-7xxx Fax: (303) 384-7397

#### **ARTICLE XXVIII. Disputes**

At the request of either Party, after reasonable attempt to settle without arbitration, any controversy or claim arising out of or relating to the CRADA shall be settled by arbitration conducted in the State of Colorado in accordance with the then current and applicable rules of the American Arbitration Association. Judgment upon the award rendered by the Arbitrator(s) shall be nonbinding on the Parties.

#### **ARTICLE XXIX. Entire CRADA and Modifications**

- A. This CRADA with its appendices contains the entire agreement between the Parties with respect to the subject matter hereof, and all prior representations or agreements relating hereto have been merged into this document and are thus superseded in totality by this CRADA. This CRADA shall not be effective until approved by DOE.
- B. Any agreement to materially change any terms or conditions of this CRADA or the appendices shall be valid only if the change is made in writing, executed by the Parties hereto, and approved by DOE.

# **ARTICLE XXX.** Termination

This CRADA may be terminated by either Party upon thirty (30) days written notice to the other Party. This CRADA may also be terminated by the Contractor in the event of failure by the Participant to provide the necessary advance funding (if applicable), as agreed in Article III. In the event of termination by either Party, each Party shall be responsible for its share of the costs incurred through the effective date of termination, as well as its share of the costs incurred after the effective date of termination, and which are related to the termination.

Approval:	
FOR CONTRACTOR: BY	FOR PARTICIPANT: BY
TITLE	TITLE
DATE	DATE
DOE APPROVAL: BY	
TITLE	
DATE	